

Spot Safety Project Evaluation

Project Information

Order ID: 41000030293

Project ID: 07-08-208

Location: NC 150 at SR 2321(Strawberry Road)

County: Guilford

City: Summerfield

Division: 7

Signal ID: 07-2020

Countermeasure: Install traffic signal at intersection of NC 150 and SR 2321 (Strawberry Road).

Project Completion: March 30, 2010

Project Cost: \$65,000

Map and Aerial (from Google Maps, Google Coordinates are - 36.197066,-79.861854)



Naive Before and After Analysis

Before Period: October 1, 2005 through January 31, 2010 (4 years, 4 months)

Const. Period: February 1, 2010 through April 30, 2010

After Period: May 1, 2010 through August 31, 2014 (4 years, 4 months)

Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection for the NC 150 and SR 2123 approaches.

Target Crashes: Frontal Impact Crashes. Please note that Frontal Impact Crashes were the target crashes for the applied countermeasure. Frontal Impact crashes include: Left turn, same roadway; Left turn, different roadways; Right turn, same roadway; Right turn, different roadways; Head on; and Angle.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	24	8	- 66.7 %
Total Severity Index	3.77	2.85	- 24.4 %
Target Crashes	14	3	- 78.6 %
Target Crash Severity Index	5.23	1.0	- 80.9 %
Volume (2007, 2012)	10,300	10,800	+ 4.9 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	0	N/A
Class A injury Crashes	0	0	N/A
Class B injury Crashes	2	0	- 100.0 %
Class C Injury Crashes	7	2	- 71.4 %
Property Damage Only	15	6	- 60.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Angle (Target)	11	2	- 81.8 %
Left Turn, Different Roadway (Target)	2	1	- 50.0 %
Northbound Rear- Ends	5	3	- 40.0 %

Overall Summary Results

Total Crashes:	- 67 %	(reduction)
Total Crash Severity:	- 24 %	(reduction)
Target Crashes:	- 79 %	(reduction)
Target Crash Severity:	- 81 %	(reduction)
Volume:	+ 5 %	(increase)

Additional Summary Results

Angle (Target):	- 82 %	(reduction)
Left Turn, Different, Roadway (Target):	- 50 %	(reduction)
Northbound Rear Ends:	- 40 %	(reduction)

Items for Discussion/Concerns

Angle crashes in the intersection were reduced from 11 crashes in the before period to 2 crashes in the after period.

All frontal impact crashes were reduced in the after period.

Data Prepared For

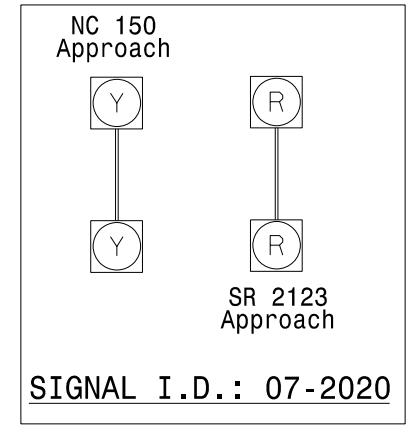
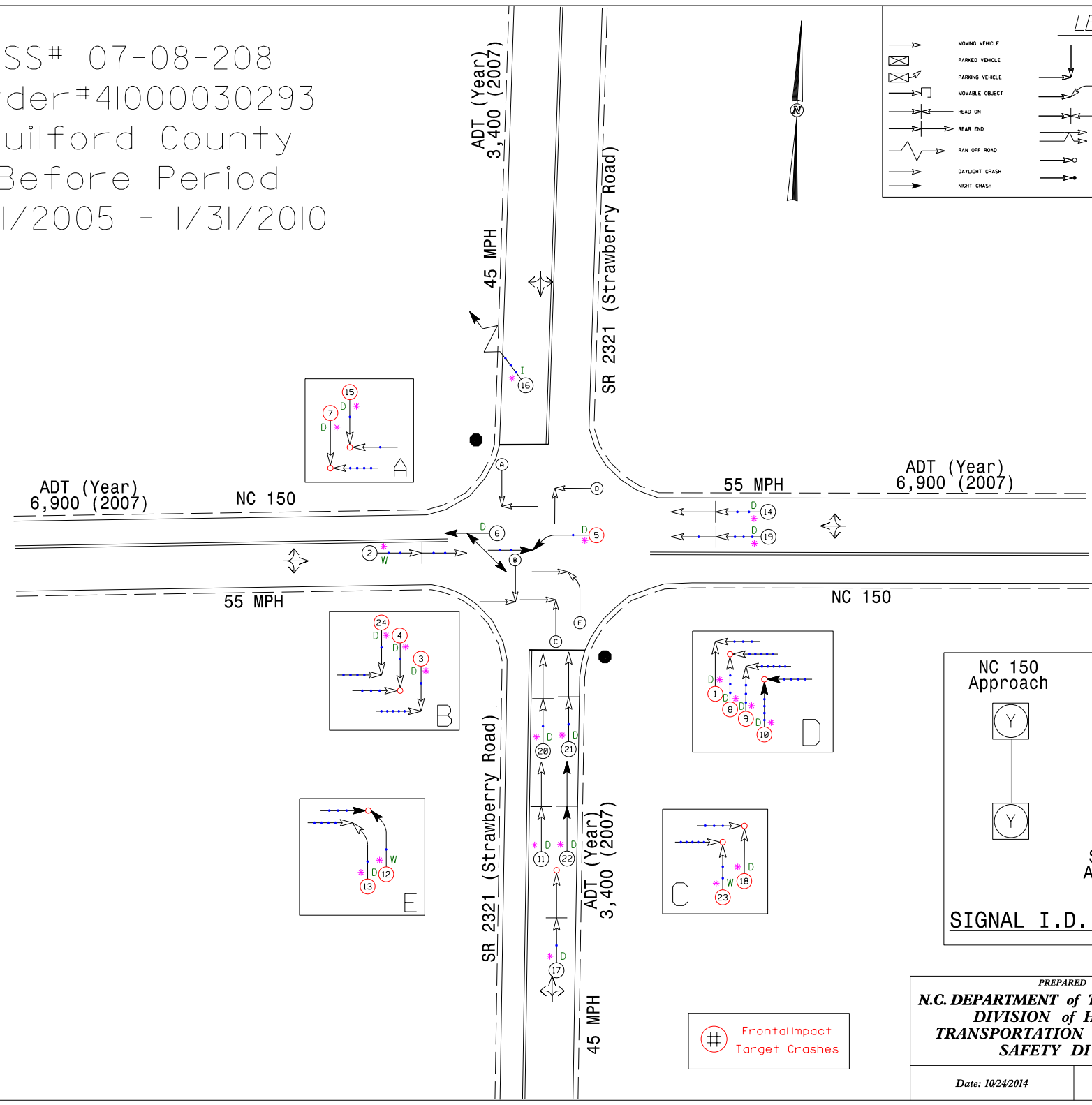
The Traffic Safety Unit *of the*
Transportation Mobility and Safety Division *of the*
Division of Highways *of the*
North Carolina Department of Transportation

Data Prepared By

Principal Investigator: Elizabeth Scott, EI
Work Group/Consultant: Stantec Consulting Services Inc.
Date: October 24, 2014

SS# 07-08-208
 Order# 41000030293
 Guilford County
 Before Period
 10/1/2005 - 1/31/2010

LEGEND			
	MOVING VEHICLE		ANGLE
	PARKED VEHICLE		TURNING
	PARKING VEHICLE		BACKING
	MOVABLE OBJECT		SIDESWIPE
	HEAD ON		INJURY
	REAR END		FATALITY
	RAN OFF ROAD		9 MPH OR LESS
	DAYLIGHT CRASH		10 MPH TO 19
	NIGHT CRASH		20 MPH TO 29
			30 MPH TO 39
			40 MPH TO 49
			50 MPH TO 59
			60 MPH TO 69
			70 AND UP
			SPEED UNKNOWN
			A ANIMAL
			P PEDESTRIAN
			B BICYCLE
			T TRAIN
			* DRIVER AT FAULT
			D DRY
			W WET
			I ICY OR SNOWY
			O Other



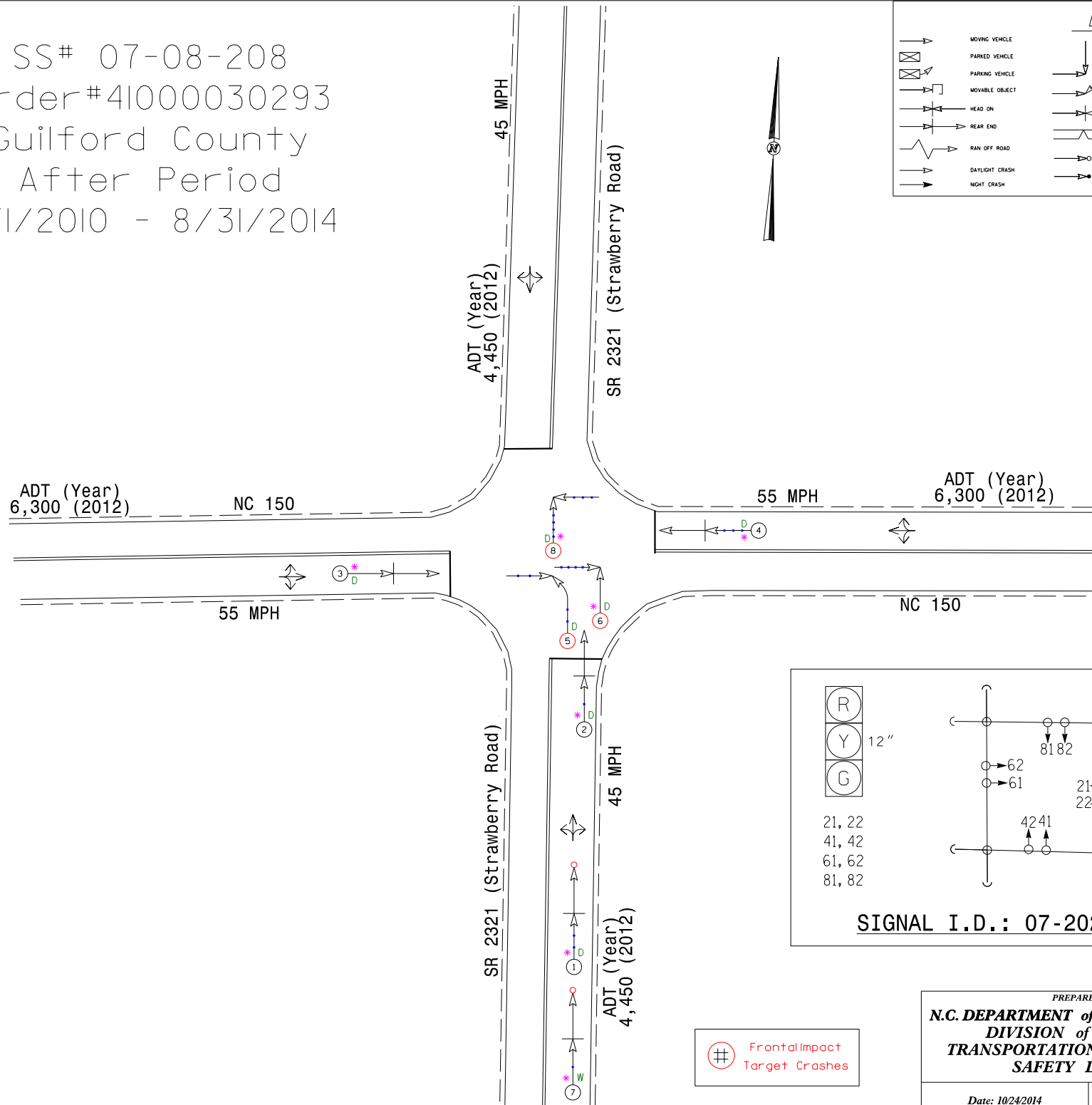
⊕ Frontal Impact
 ⊕ Target Crashes

PREPARED FOR
N.C. DEPARTMENT of TRANSPORTATION
 DIVISION of HIGHWAYS
TRANSPORTATION MOBILITY and SAFETY DIVISION

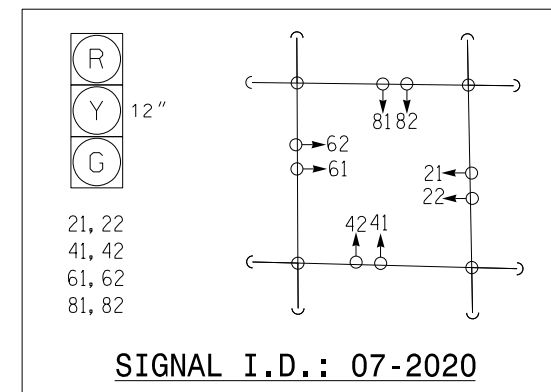
Date: 10/24/2014
 Prepared By: ESS

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SS# 07-08-208
 Order#41000030293
 Guilford County
 After Period
 5/1/2010 - 8/31/2014



LEGEND			
	MOVING VEHICLE		ANGLE
	PARKED VEHICLE		TURNING
	PARKING VEHICLE		BACKING
	MOVABLE OBJECT		SIDESWIPE
	HEAD ON		INJURY
	REAR END		FATALITY
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Frontal Impact
 Target Crashes

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